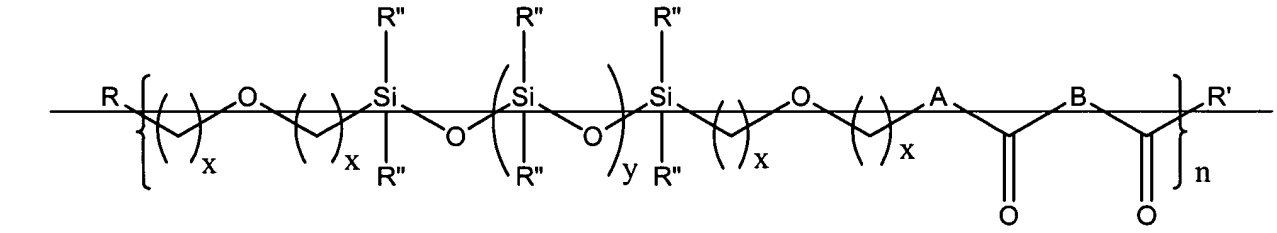
Amendments to the Claims:

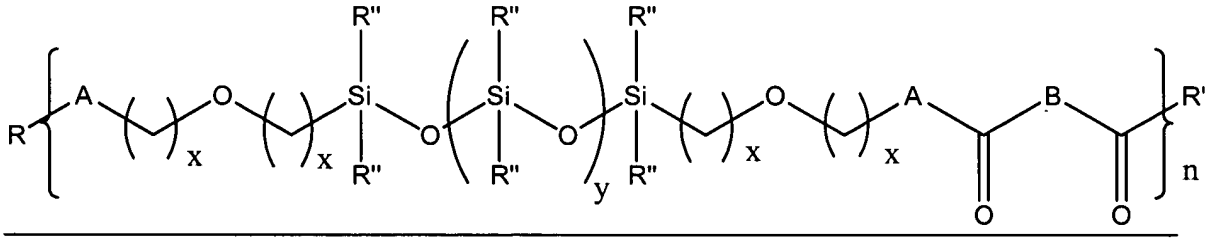
This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-6. (Canceled)

7. (Currently amended) A polyorganosilicone of the formula:





wherein

each [[of]] R, ~~R', and R",~~ independently, is a ~~hydrogen,~~ hydroxy, or amino[[,]]; each R', independently is a hydroxy or alkoxy; each R", independently is a hydrogen, alkyl, alkoxy, aryl, or aryloxy;

each x, independently, is an integral of 1 to 10;

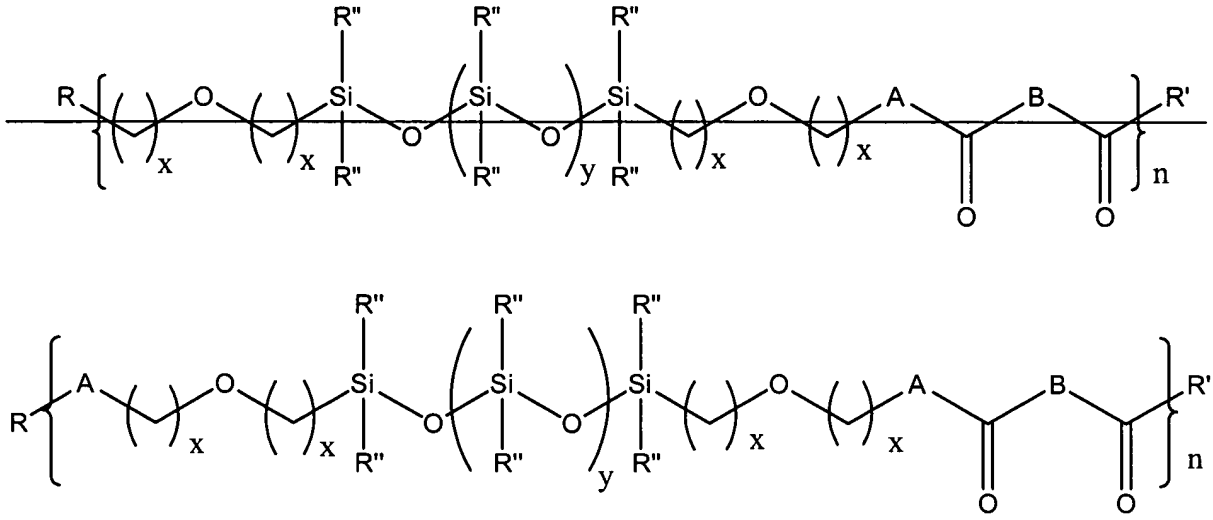
y is an integral of 1 to 1,000;

n is an integral of 1 to 10,000;

A is O or NH; and

B is ~~alkyl, aryl,~~ alkylene, arylene, or ~~alkoxy~~ oxaalkylene.

8. (Currently amended) A composition or structure comprising a polyorganosilicone of the formula:



wherein

each [[of]] R, ~~R', and R",~~ independently, is a ~~hydrogen,~~ hydroxy, or amino[[,]]; each R', independently is a hydroxy or alkoxy; each R", independently is a hydrogen, alkyl, alkoxy, aryl, or aryloxy;

each x, independently, is an integral of 1 to 10;

y is an integral of 1 to 1,000;

n is an integral of 1 to 10,000;

A is O or NH; and

B is ~~alkyl, aryl,~~ alkylene, arylene, or ~~alkoxy~~ oxaalkylene.

9. (Previously presented) The composition of claim 8, further comprising a fire retardant.

10-11. (Canceled)

12. (Previously presented) A method of synthesizing a polyorganosilicone polymer of claim 7, the method comprising:

mixing linear or cyclic monomers, oligomers, macromers, or a combination thereof to form a monomer mixture;

adding a lipase, esterase, or protease to the monomer mixture to form a reaction mixture; and

reacting the reaction mixture for a time and under polymerizing conditions suitable to obtain the polyorganosilicone polymer.

13. (Previously presented) The method of claim 12, further comprising mixing the polymer with a fire-retardant.

14. (Previously presented) A method of retarding fire, the method comprising using the polyorganosilicone polymer of claim 7 as a fire-retardant.

15. (Previously presented) A method of retarding fire, the method comprising using the composition or structure of claim 9 as a fire-retardant.

16. (Previously presented) A method of controlled drug delivery, the method comprising using the polyorganosilicone polymer of claim 7 as a carrier for controlled drug delivery.

17. (Previously presented) A method of delivering bio-implants, the method comprising using the polyorganosilicone polymer of claim 7 as a carrier for bio-implants.

18. (Previously presented) A method of tissue engineering, the method comprising using the polyorganosilicone polymer of claim 7 as a biodegradable matrix for tissue engineering.

19. (Previously presented) A packaging material comprising the polyorganosilicone polymer of claim 7.

20. (Previously presented) A thermal insulator comprising the polyorganosilicone polymer of claim 7.

21. (Previously presented) An antioxidant agent comprising the polyorganosilicone polymer of claim 7, and free phenolic groups.

22. (Previously presented) A photovoltaic device comprising a polyorganosilicone polymer of claim 7, and conjugated polymers.

23. (Previously presented) A biosensor device comprising a polyorganosilicone polymer of claim 7, and conjugated polymers.

24. (Canceled)

25. (Currently amended) A polyorganosilicone of claim 7, wherein x is [[one]] ten; y is [[ten]] 1000; and n is [[120]] 10000.

26. (Canceled)